FORM MR-1
(Revised November 1984)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
Telephone: (801) 538-5340

NOTICE OF INTENTION TO COMMENCE MINING OPERATIONS and MINING AND RECLAMATION PLAN

Based on Provisions of the Mined Land Reclamation Act, Title 40-8, Utah Code Annotated 1953, General Rules and Regulations and Rules of Practice and Procedures, By Order of the Board of Oil, Gas and Mining.

Mine Name: CASTLE VALLEY WhiteCap #3 Mine Mine Plan Date: (Plan Revised) May 6/86

File No.: ~~ACT~~/PRO 015/033 Date Received: Original Plan (12/27/86)

Operator: A. J. Cornell DOGM Lead Reviewer: D.W. Hedberg

Mineral(s) to be Mined: GYPSUM

Please attach other sheets as needed and include cross-reference page numbers when used.

1. Name of Applicant or Company: CASTLE VALLEY MINING COMPANY
   Corporation (X) Partnership ( ) Individual ( )

2. Address: Permanent: P.O. Box 1240
   Castledale, Utah 84513
   Temporary: _____

3. Company Representative: Name: A. J. CORNELL
   Title: PRESIDENT
   Address: P.O. Box 1240 Castledale Utah 84513 Phone: 801-637-3520 (Greenwell motel) 381-5590 (Territory Land Realty)

4. Location of Operation: County(ies) EMERY
   Township(s): 19S Range(s): 10E Section(s): 23, NW¼ Sec.
   Township(s): _____ Range(s): _____ Section(s): _____
   Township(s): _____ Range(s): _____ Section(s): _____
   BUCKHORN RESERVOIR QUADRANGLE

5. Owner(s) of record of the surface area within the land to be affected:

Name: Public land (BLM) Address: _____
Name: _____ Address: _____
Name: _____ Address: _____
Name: _____ Address: _____

6. Owner(s) of record of the minerals to be mined:

Name: U.S. Govmt. (BLM) Address: _____
Name: _____ Address: _____
Name: _____ Address: _____
Name: _____ Address: _____

7. Owner(s) of record of all other minerals, including oil and gas, within any part of the land to be affected: Oil & Gas lease U-56040 covers the subject area.

Name: BLM Address: _____
Name: _____ Address: _____
Name: _____ Address: _____

8. Have the above owners been notified in writing? (X) Yes, ( ) No. If no, why not? Mining Claims have been recorded with BLM and a Mining plan has been submitted to the local BLM office.
Utah Mining Claim (UMC) – White Cap #8 – UMC 232950

9. Have you or any other person, partnership or corporation associated with you received an approval of a Notice of Intention to Commence Mining Operations by the State of Utah for operations other than described herein? ( ) Yes, (X) No. If yes, list all approval numbers now under surety:

_____ _____ _____
_____ _____ _____
_____ _____ _____

10. Source of Operator's legal right to enter and conduct operations on the land to be covered by this Notice: 1872 Mining law, Operator is * Holder/Owner or lessee of mining claims for area of proposed operations. Lease for mining claims were obtained from Clark Powell, et.al. (160 Acre placer mining claim)

11. Give the names and mailing addresses of every principal Executive, Office, Partner (or person performing a similar function) of Applicant:

	Name	Title	Address
A.	A.J. Cornell	President	P.O. Box 1240 Castledale Utah 84513
B.			
C.			
D.			

12. Has the Applicant, any subsidiary or affiliate or any person, partnership, association, trust or corporation controlled by or under common control with the Applicant, or any person required to be identified by Item 11 ever had an approval of a Notice of Intention to Mine or Explore withdrawn or has surety relating thereto ever been forfeited? ( ) Yes, (X) No.

    If yes, please explain: _____

Please note: Section 40-8-13 of the Act provides that information relating to the location, size or nature of the deposit, and marked confidential by the Operator, shall be protected as confidential information by the Board and the Division and not be a matter of public record in the absence of a written release from the Operator, or until the mining operation has been terminated as provided in Subsection (2) of Section 40-8-21 of the Act. This material should be so marked and included on separate cross-referenced sheets.

13. All maps and plans prepared for submission shall be of adequate scale and detail to show topographic features and clearly indicate the following details: * REFER TO ATTACHED MAPS

    A. Location and delineation of the extent of the land previously affected, as well as the proposed surface disturbance.
    B. Existing active or inactive, underground or surface mined areas.
    C. Boundaries of surface properties, including ownership.
    D. Names and locations of:
        (1) Lakes, rivers, streams, creeks and springs.
        (2) Roads, highways and buildings.
        (3) Active or abandoned facilities.
        (4) Transmission lines within 500 feet of the exterior limits of land affected.
        (5) Gas and/or oil pipelines.
        (6) Site elevation.
    E. Drainage patterns of land affected:
        (1) Overburden or topsoil removal and storage areas.
        (2) Areas susceptible to erosion.
        (3) Natural waterways.
        (4) Constructed drainages, diversions, berms and sediment ponds (design calculations shall be included).
        (5) Receiving waters (State Health classification).
        (6) Directional flow of all surface waters (indicated by arrows).
    F. Known drill holes:
        (1) Location.
        (2) Status.

(3) Depths and thicknesses of:*
   a. Water bearing strata.
   b. Mineral deposits.
   c. Toxic or potentially toxic materials.
   d. Surficial or plant supporting material (topsoil and subsoil).

G. Locations of disposal and stockpile areas:
   (1) Topsoil and subsoil storage areas.
   (2) Overburden storage area.
   (3) Waste, tailings, rejected materials.
   (4) Raw ore stockpile(s).
   (5) Tailings-ponds and other sediment control structures.
   (6) Discharge points, water effluents (see #15[D]).

All maps should have a color code or other suitable legend used in preparation to clearly indicate surface features of the land affected. A general reference map completed on a 7.5 (1:24,000) USGS quadrangle sheet is recommended with additional large scale maps included for practical delineation of individual facilites, (e.g., 1:200, 1:500).

14. Acreage to be disturbed:

A. Minesite (operating, storage, disposal areas, etc.): @ 10 ACRES = @ 2 ACRES/YR. for 5YR. Permit Term
B. Access/haul roads/conveyors: 1 ACRE
C. Associated on-site processing facilities: NONE

15. Describe mining method to be employed, including:

A. Mining sequence:
   (1) Map delineating the yearly sequential disturbance (if surface mine) and/or surficial disturbance.
   (2) Narrative (including on-site processing or mineral treatment):

Refer to Attachment # 1, Item # 4, "Description of Operation."

note * The mill will now be located in Huntington, Utah. Therefore there will be no processing facilities located at the Minesite.

Attach supplemental sheets and/or diagrams as necessary with cross reference to page number here: _____.

*Stratigraphic or lithologic logs if correlated to footage depths may be presented when labeled (maps or logs should be labeled confidential, if so desired).

B. If sedimentary deposit seam(s):
(1) Thickness(es): 12 to 20 feet gypsum bed (15 ft. average anticipated)
(2) Dip: almost flat, slight dip toward North
(3) Outcrop: at the surface (Carmel formation)

C. Will any underground workings or aquifers be encountered? ( ) Yes, (X) No. If yes, describe potential impacts and protection measures to be taken: The active zone (outcrop) to be mined is well above any groundwater aquifers. Operations will not impact the water table or any underground workings.

D. Describe any active discharge or proposed discharge of water from mine or site area. Include water quality data and lab test reports. If attached sheets or reports are included, cross reference to page number here: No water will be discharged other than surface runoff and snowmelt which will likely be absorped into the dry permeable gypsum exposed at the surface. No process water will be used onsite. Culinary water will be hauled to the site for domestic purposes only, on a daily basis.

16. Have all necessary water rights been appropriated? ( ) Yes, (X) No. How will water be obtained? Please explain: Any water used at the mine will be hauled. Primary usage will be culinary.

17. Proposed or estimated duration of mining operation: 5 YEAR PERMIT TERM
Will the permit term be for a lesser amount of time, subject to review? (e.g., for surety estimate reasons). (X) Yes, ( ) No. If yes, how long? Mine life depends on long term market & demand for product.

18. Describe the construction and maintenance of access roads including:
A. Procedures (drainage and erosion control methods).
B. Cross section(s).
C. Profile(s) of proposed road grade(s).

Access will be gained via existing roads (State, County, BLM + onsite)

* Maintenance agreements for road usage will be in accordance with County and BLM requirements and contract agreements reached through negotiation with the respective entities.

Onsite road maintenance will be performed on an as-needed basis to minimize erosion and offsite contribution of excessive sediment. (see attached map).

Attach supplemental diagrams and cross reference to page number here: _____.

19. Prior land use(s): GRAZING & RECREATION
Current land use(s): GRAZING & RECREATION
Possible projected or prospective future land use(s): GRAZING & RECREATION

20. Describe methods of tree and brush removal: Brush & assoc. vegetation will be removed by bulldozer or grader. As topsoil is stripped, vegetative cover will be removed and allowed to become incorporated into the topsoil stockpiles as supplemental organic matter. No trees are located in the area of operations.

Provide estimate of, and method of obtaining existing vegetation cover (%): Cover density is @ 20%, DOGM estimate (biologist onsite estimate) ocular

What types of dominant vegetation are present? sage, rabbitbrush, fourwing saltbrush, shadscale, various grasses & forbs. mormontea, winterfat (indian ricegrass, curly grass)

Photographs and/or maps may be attached to these forms, cross reference to page number here: _____.

21. Soils (surficial plant supportive material) and overburden: Except where slope or rocky terrain make it impossible, all surficial materials suitable as a growth medium shall be removed, segregated and stockpiled according to its ability to support vegetation (as determined by soil analysis and/or practial revegetation experience) prior to any major excavation. (Suggested minimum requirements are the top six inches, or the "A" horizon, whichever is larger.)

A. What is the pH range of the soil before mining? unknown
Name of person or agency and method of determining pH: not sampled

Attach lab report if available. Cross reference page number here: _____.

B. Average depth of topsoil and subsoil to be stripped and stockpiled: The limited soil depth varies from 0-12" over the site, (aeolian sands) in small ravines, ephemeral drainages & associated topographic surface depressions. Calculated volume of soil to be stockpiled: not calculated because isolated pockets of soil

C. Describe the method for removing and stockpiling topsoil and subsoil, including measures to protect topsoil from wind and water erosion, compaction and pollutants: Topsoil will be pushed to the western edge of the active operations and stockpiled using a dozer or grader. Topsoil will be replaced at the end of each years mining activity. The operator will perform contemporaneous reclamation each fall of the seasonal disturbance that preceded during the year.

* how precipitation rates will help reduce erosion. If necessary, the stockpiles will be bermed.

D. Describe the method for removing and stockpiling overburden. Describe and discuss the acidity or alkalinity (pH) or other characteristics which would affect revegetation: No overburden will need to be removed. Gypsum outcrop is at the surface. limited topsoil resource is the only "overburden" which would be removed and stockpiled for reclamation.

E. Rock subjected to processing such as waste rock, tailings, etc., and which is to be disposed of on- or off-site must be subjected to a toxicity analysis. The method of determination, results and suitable disposal methods must be explained in detail, including means for containment and long range stability*: After mining, the gypsum is crushed, dried and shipped. No chemicals for toxic substances are used during processing. except for drying the parent material is not altered. Material not suited for shipment will be returned to mined out areas before reclamation commences. (very little is anticipated). No toxic waste rock or tailings exist which will need to be disposed of, except for some weathered gypsum which may not be of economic value or stability. No waste dumps will be created. No oil or lubricants will be drained onto the ground surface. Any accidental spills will be promptly cleaned up, recovered and disposed of properly at the approved landfill.

22. Describe the methods used to minimize public safety and welfare hazards during and after mining operations including:

A. Shaft, tunnel and drill hole closure. (will not exist as part of operations)
B. Disposal of trash, scrap metal and wood and extraneous debris, waste oil and solvents, unusable buildings and foundations, sewage and other materials incident to mining.
C. Posting of appropriate warning signs and/or fences or berms to act as barriers (e.g., above highwalls) in locations where public access is available.

B. All trash will be consolidated in an appropriate location onsite temporarily until it can be transported to the nearest city or county dump. There will be no foundations or buildings at the minesite. A portable latrine will be used on the minesite.

C. No dangerous topographic features will be created except for the possibility of a few small scale highwalls. Appropriate signs will be posted around points of mine access to warn the public of any dangerous areas.

---

*"Toxic" means any chemical or biological or adverse characteristic of the material involved which could reasonably be expected to negatively affect ecological or hydrological systems or could be hazardous to the public safety and welfare.

23. Grading and soil redistribution.

A. Attach pre- and postmining contour cross sections, typical of regrading designs. Cross reference to page number here: none required by state.

B. Describe the method(s) of overburden replacement and stabilization and highwall elimination, including: (a) slope factors; (b) lift heights; (c) compaction; (d) terracing, etc., (e) also include testing procedures: Refer to "reclamation plan", attachment #2

C. What method of spreading topsoil and subsoil or upper horizon material on the regraded area will be employed? Topsoil will be spread back over disturbed areas by grader or bulldozer. The operator may incorporate suggestions of State and BLM concerning reestablishment of smaller "islands" of vegetation and soil.

1. Indicate the approximate depth of soil cover after final surfacing @6" anticipated, depends upon amount available from salvage and stockpiling during initial disturbance. inches

2. What tests will be performed to adequately evaluate the potential of the soil to successfully support intended revegetation? Operator will follow the recommendations of the State or BLM regulatory authorities.

3. What soil amendments or fertilizers will be needed as an aid to revegetation? Operator will follow the recommendations of the State or BLM based upon analyses results at time of reclamation (if determined necessary). by State or BLM
Type: Rate:
Type: Rate:
Type: Rate:

4. What additional surface preparations will be used? Describe (a) drainage, erosion and sediment control measures; (b) maximum slope characteristics; and (c) highwall reclamation.

Refer to "Reclamation Plan", attachment # 2.

* Any remaining highwalls will be reduced to a 50% or 1:2 slope. Disturbed areas will be regraded to approximate original contour. Slopes should be less steep than at present, thereby reducing erosion potential from current rates.

The operator will consider using the State suggestion of incorporating additional organic material (i.e., local available old/rotten hay) as a means of extending the limited soil resource upon reclamation. The operator will rip the subsoil before topsoil is replaced prior to planting which will improve root penetration.

5. Describe methods which may be particularly applicable to waste disposal areas determined to be potential problem areas.

Not Applicable as there will not be any waste disposal areas generated or regulated during the mining operations.

D. Describe plans for either leaving or reclaiming the roads and pads associated with the operation.

All roads, pads constructed, upgraded and used for onsite operations will be reclaimed upon termination of mining operations. The county and BLM owned and controlled roads used to access the minesite will not be reclaimed. These are existing roads which have postmining use.

24. Impoundments: All evaporation, tailings and sediment ponds; spoil piles, fills, pads and regraded areas shall be self-draining and nonimpounding when abandoned unless previously approved as an impounding facility by a lawful state or federal agency. In view of this, please describe the reclamation of all related areas in the operation and include pertinent items enumerated in C, 1-5 above. Refer to "Reclamation Plan", Attachment # 2

* No evaporation, tailings or sediment ponds are proposed as part of mining operations. All areas will be regraded to approximate original contour and shall be self-draining and nonimpounding upon abandonment of the reclaimed site. Should future operations require a change in this regard, the operator will request an amendment to the permit from the state and BLM regulatory agencies.

25. Revegetation plans:

A. What organization, agency or person will specifically be performing the revegetation? will be performed by operator or contracted.

B. Will the affected area be subject to livestock or wildlife grazing? (X) Yes, ( ) No. Will vegetation protection be needed to allow for a determination of the successful revegetation criteria outlined in the Mined Land Reclamation Act, Rule M-10(12)? ( ) Yes, (X) No. If yes, what measures will the operator take? Not anticipated at this time. However, if cattle and wildlife use must be controlled, then the disturbed areas that are reclaimed will be fenced. Will follow State or BLM recommendations.

C. Will irrigation be used? ( ) Yes, (X) No. Type: _____. For how long? _____.

D. Test plots initiated during the early stages of mine development provide good bases from which a successful revegetation program can be adapted for later implementation. Will test plots be employed? ( ) Yes, (X) No. If yes, describe on an additional sheet(s) and attach. Cross reference page number here and show location on facilities map: _____.

E. Please attach a revegetation plan and schedule including:
1. Species to be used. * Refer to Attachment #3.
2. Rate of seed application/acre. "BLM Stipulated Approval"
3. Season to be planted. (Fall, OCT 15-NOV 30)
4. Seedbed preparation techniques. (Subsoil will be ripped to @ 6" depth before retopsoiling occurs.)
5. Planting location, slope face direction, variability, method of application, covering, etc.
6. Mulch and fertilizer application, if used.

F. Describe any other maintenance procedures which may be used, if needed, to guarantee successful revegetation: None are anticipated at this time.

* The operator will supplement unsuccessful revegetation efforts with additional seeding, fertilizer & mulch (if necessary) should the initial efforts not meet the revegetation success standards of 70% of original (undisturbed) cover density. (Approx. 15% cover density will be required before bond release can occur from the State)

26. Please provide a reclamation schedule including:

A. Estimated time for construction. @ 2-3 mths.
B. Estimated time for interim reclamation. fall of each year
C. Estimated duration of the mining operation. 5 yr. permit term initially, operator will request extension as necessary depending on future market conditions.
D. A time table for the accomplishment of each major step in the reclamation plans. Attach the schedule and cross reference to the page number here: Contemporaneous reclamation is anticipated during the fall of each year following seasonal disturbance. @ 2 Acres of surface disturb. per year. prior

27. A surety guarantee must be provided for the mining operation (see Rule M-5 Mined Land Reclamation Act). In calculating this amount, the Division will consider the following major steps based on the information provided in this report: The BLM has stipulated that the operator post a $25,000 reclamation bond for the mine. The State DOGM will prepare a detailed reclamation cost breakdown and use this estimate as a basis for establishing the total reclamation surety requirements for the operation. The bond will be jointly held by the BLM and State. Only one bond should be required.

* refer to Attachment #3, item 5.

A. Clean up and removal of structures.
B. Backfilling, grading and contouring.
C. Topsoil and subsoil redistribution and stabilization.
D. Revegetation (i.e., preparation, seeding, mulching, irrigation).
E. Labor.
F. Safety and fencing.
G. Monitoring, and reseeding if necessary.

To assist the Division, the operator may attach a list of costs and factors which would satisfy these areas. Substantiation of these factors, i.e., unit costs and how they are derived, should accompany the list. Cross reference the page number here: The DOGM will prepare a detailed reclamation cost estimate for this operation (as agreed during 4/29/86 meeting)

28. A request for a variance from specific commitments to Rule M-10 (Reclamation Standards) of the Mined Land Reclamation Act may be submitted with adequate written justification. If after presentation of information adequately detailing the situation, a determination is made that finds a portion of the rule inapplicable, a variance may be granted by the Division.

I hereby commit the applicant to comply with Rule M-10, "Reclamation Standards" in its entirety, as adopted by the Board of Oil, Gas and Mining on March 22, 1978.

The applicant will achieve the reclamation standards for the following categories as outlined in Rule M-10 on all areas of land affected by this mine, unless a variance is granted in writing by the Division.

Rule	Category of Commitment	Variance Requested? — None at this time.
M-10(1)	Land Use	
M-10(2)	Public Safety and Welfare	
M-10(3)	Impoundments	
M-10(4)	Slopes	
M-10(5)	Highwalls	
M-10(6)	Toxic Materials	
M-10(7)	Roads and Pads	
M-10(8)	Drainages	
M-10(9)	Structures and Equipment	
M-10(10)	Shafts and Portals	
M-10(11)	Sediment Control	
M-10(12)	Revegetation	
M-10(13)	Dams	
M-10(14)	Soils	

I believe a variance is justified on a site-specific basis for the previous subsections of Rule M-10 as indicated. A narrative statement explaining these concerns is attached.

STATE OF UTAH

COUNTY OF SALT LAKE

I, A.J. CORNELL, having been duly sworn depose and attest that all of the representations contained in the foregoing application are true to the best of my knowledge; that I am authorized to complete and file this application on behalf of the Applicant and this application has been executed as required by law.

Signed: A.J. Cornell

Taken, subscribed and sworn to before me the undersigned authority in my said county, this 18th day of June, 1986.

Notary Public: Marjorie L. Anderson

My Commission Expires: July 24, 1989

PLEASE NOTE:

Section 40-8-13(2) of the Mined Land Reclamation Act provides for maintenance of confidentiality concerning certain portions of this report. Please check to see that any information desired to be held confidential is so labeled and included on separate sheets or maps.

Only information relating to the location, size or nature of the deposit may be protected as confidential.

Confidential Information Enclosed: ( ) Yes (X) No

MINE MAPS

1. Maps must be clear and legible contour maps or recent aerial photos. The scale should be 1 inch = 500 feet to adequately show topographic features.

2. Map sheets should be of a reasonable size, not to exceed 48 inches on a side.

3. Maps must have a title block with:

   A. Map title.
   B. Name and address of permittee.
   C. Permit and amendment numbers.
   D. Annual report period.
   E. Scale, north arrow, contour interval, date of photography, etc.

4. All maps must show:

   A. Legal subdivisions.
   B. Permit area boundary clearly shown and labelled.
   C. Amendment areas clearly shown and labelled.
   D. Contour features.

5. The following features should all be clearly identified:

   A. Topsoil stockpiles (numbered and with volumes).
   B. Settling ponds and sediment control structures.
   C. Haul roads.
   D. Pits identified by location, name, number, etc.
   E. Ramps (numbered).
   F. Out-of-pit spoil dumps.
   G. All waste disposal sites including, but not limited to:
      1. Landfill sites.
      2. Carbonaceous waste dumps.
   H. Diversion ditches.
   I. Monitoring sites.